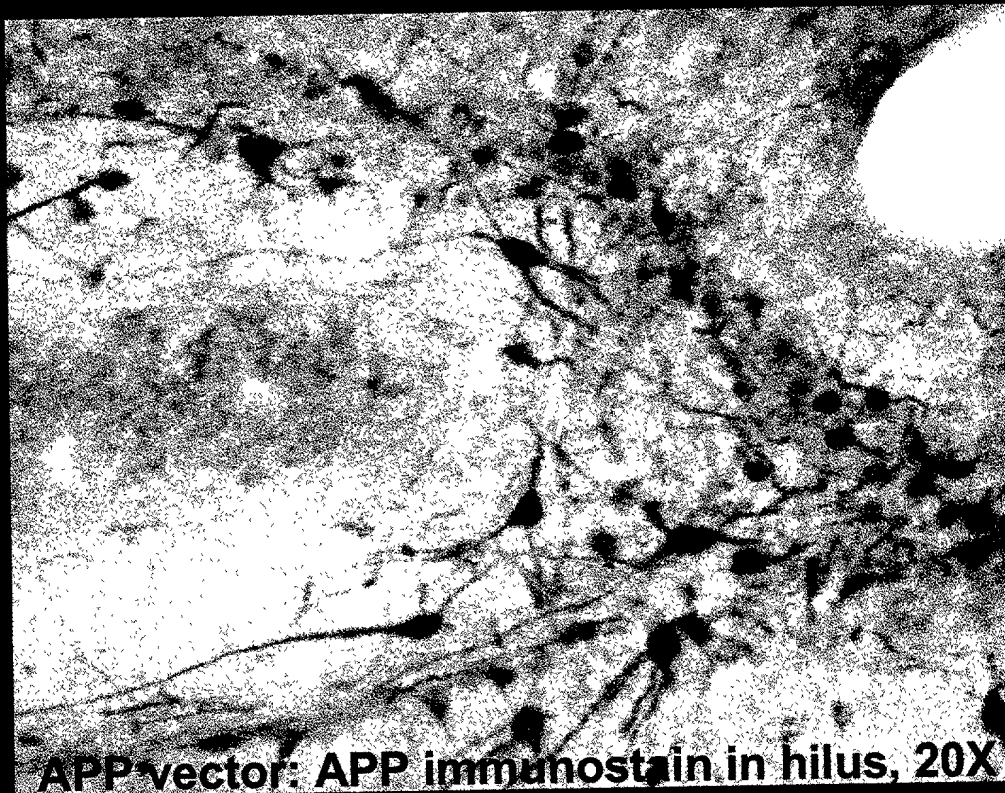


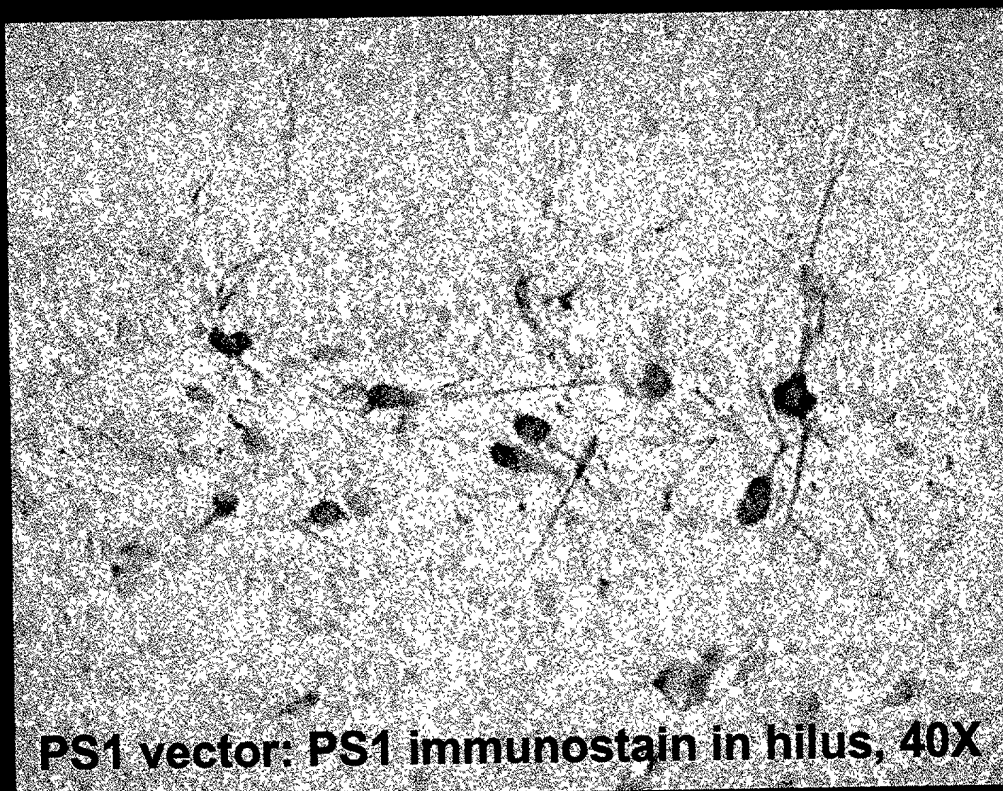
FIGURE. 1. DNA Constructs used in this application. The schematic diagrams represent the expression cassettes which are packaged into the recombinant adeno-associated virus (AAV) vectors. Abbreviations: TR, AAV terminal repeats; PrCBA, cytomegalovirus/chicken beta-actin hybrid promoter; IRES, internal ribosome entry sequence which allows for bicistronic expression of two transgenes; *gfp*, green fluorescent protein; pA, poly adenylation sequence. Human DNA sequences to model neurodegenerative diseases: APP, amyloid precursor protein mutant form linked to Alzheimer's disease; presenilin 1 mutant form linked to Alzheimer's disease; tau wild type and mutant form linked to fronto-temporal dementia with parkinsonism linked to chromosome 17; alpha-synuclein wild type and mutant forms linked to Parkinson's disease.

2A



APP vector: APP immunostain in hilus, 20X

2B



PS1 vector: PS1 immunostain in hilus, 40X

FIGURE 2

3A

red: tau
green: GFP
blue: DAPI

3B

filamentous tau

FIGURE 3

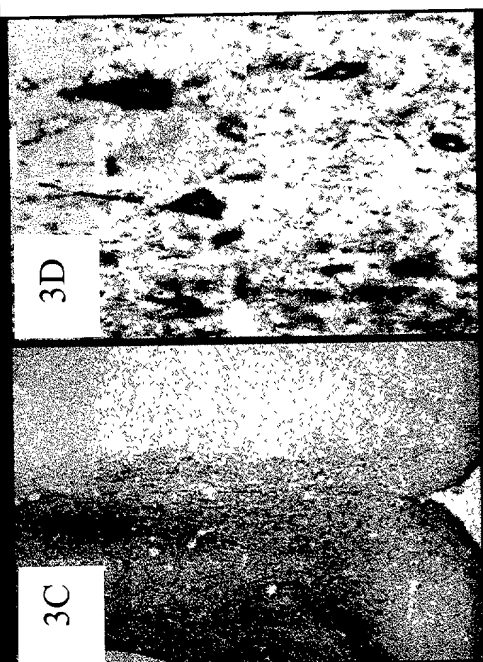


FIGURE 3

3E

3F

3G

3H

3I

3J

3K

FIGURE 3

A

C

B

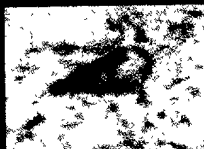
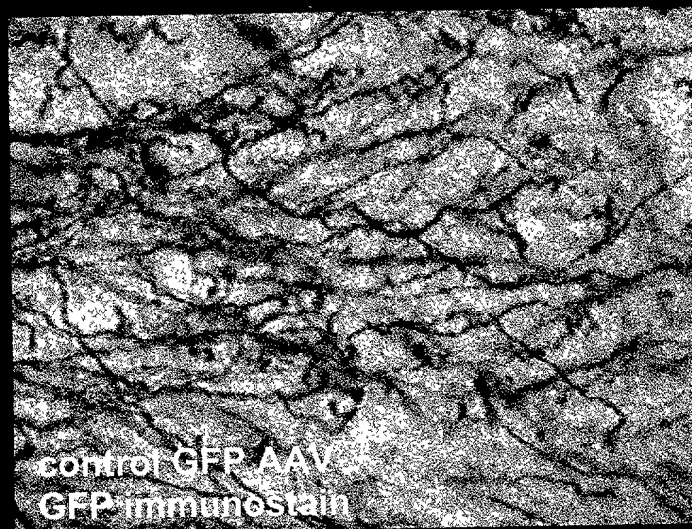
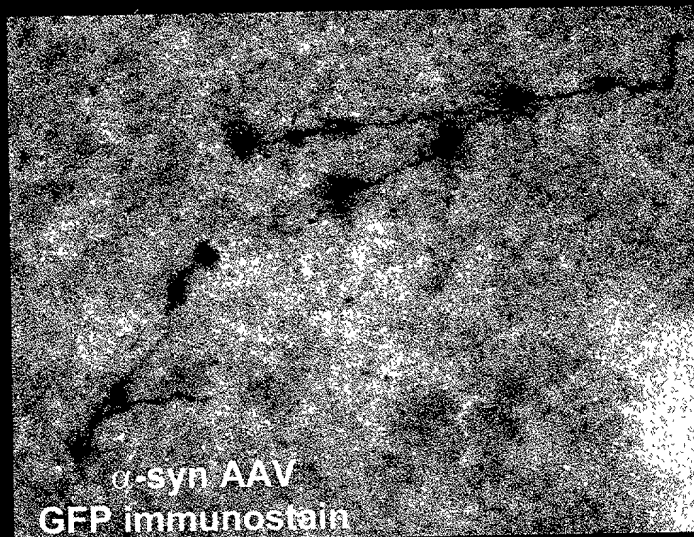


FIGURE 4

A30P α -synuclein somatic gene transfer and axon morphology

α -syn AAV
GFP native fluorescence



4D

4E

4F

FIGURE 4

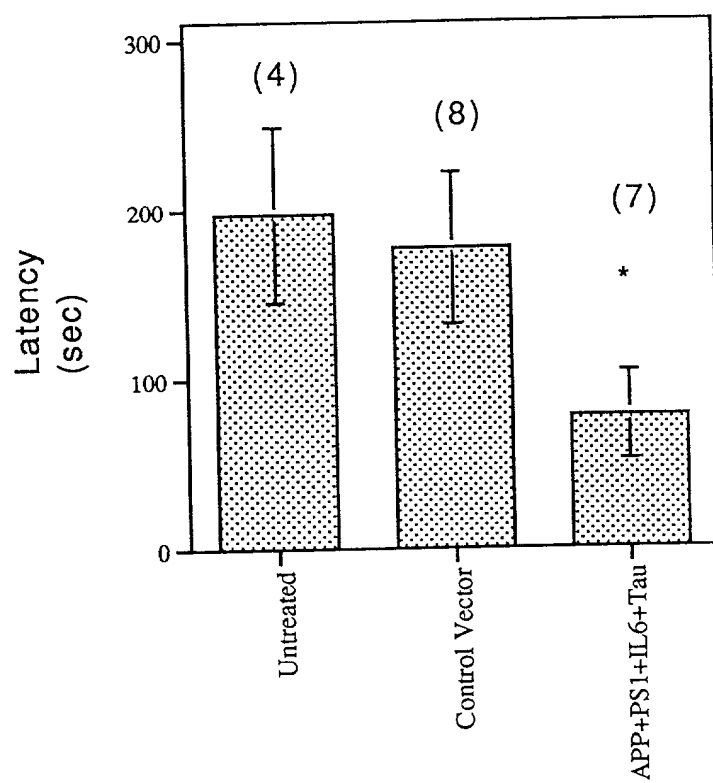
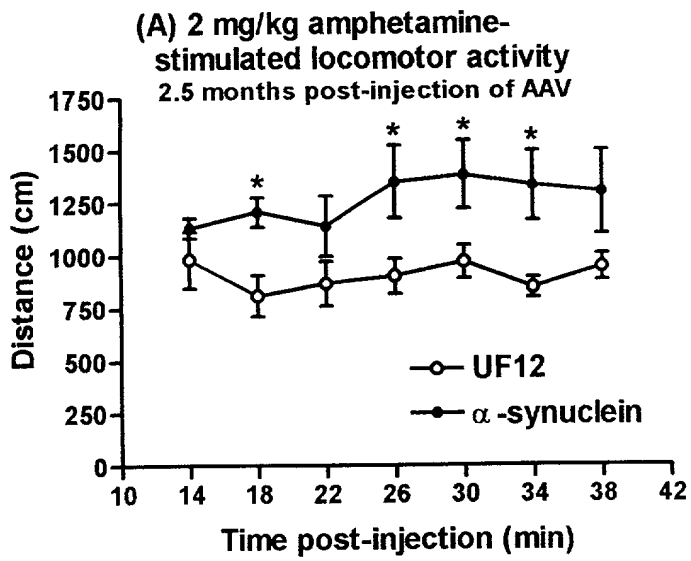
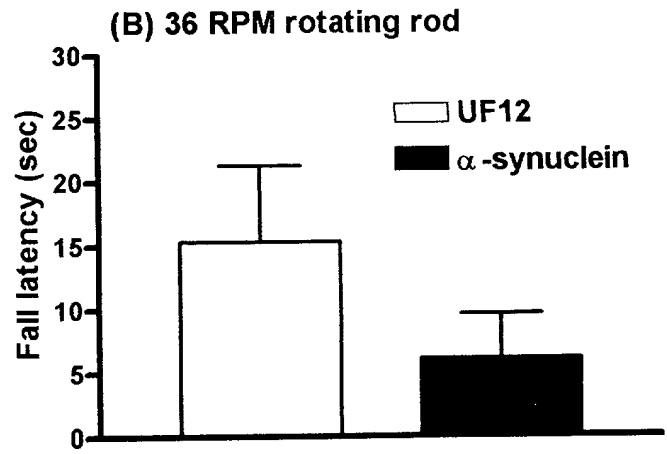


FIGURE 5



6A



6B

FIGURE 6